

## **CLAIMS**

We claim:

- 1    1. A method for purging abandoned shopping carts from an electronic commerce web site,  
2    comprising the steps of:

3                 identifying shopping carts that belong to guest shoppers of an electronic commerce web  
4    site and shopping carts that belong to established shoppers of the electronic commerce web site;

5                 applying a guest shopper garbage collection routine to the shopping carts that belong to  
6    guest shoppers; and

7                 applying an established shopper garbage collection routine to the shopping carts that  
8    belong to established shoppers.

1       2. A method for purging abandoned shopping carts from an electronic commerce web site,  
2 comprising the steps of:

3           determining a number of shopping carts that belong to guest shoppers in an electronic  
4           commerce web site;

5           comparing the number of shopping carts that belong to guest shoppers with a guest  
6           shopper threshold; and

7           when the number of shopping carts that belong to guest shoppers exceeds the guest  
8           shopper threshold, applying a guest shopper garbage collection routine to the shopping carts that  
9           belong to guest shoppers.

1       3. The method of claim 2, further including the step of applying an established shopper garbage  
2           collection routine to shopping carts that belong to established shoppers.

1       4. The method of claim 2, wherein the guest shopper garbage collection routine collects garbage  
2           more frequently than the established shopper garbage collection routine.

1       5. A method for managing an electronic commerce web site, comprising the steps of:

2           creating a shopper garbage object;

3           determining whether a shopper accessing the electronic commerce web site is a guest

4           shopper rather than an established shopper;

5           when the shopper is a guest shopper, creating a guest shopper session object and  
6           registering the guest shopper session object with the shopper garbage object; and

7           when the shopper is an established shopper, creating an established shopper session  
8           object and registering the established shopper session object with the shopper garbage object.

1       6. A method for purging abandoned shopping carts from an electronic commerce web site,  
2       comprising the steps of:

3       determining a number of shopping carts that belong to guest shoppers;

4       comparing the number of shopping carts that belong to guest shoppers with a guest  
5       shopper threshold;

6       when the number of shopping carts that belong to guest shoppers exceeds the guest  
7       shopper threshold, determining a last transaction time of a guest shopper;

8       comparing the last transaction time to an expiration time;

9       when the last transaction time is earlier than the expiration time, purging a shopping cart  
10      that belongs to the guest shopper.

1       7. A method for purging abandoned shopping carts from an electronic commerce web site,  
2       comprising the steps of:

3              polling a threshold object by a shopper garbage object to determine a number of shopping  
4       carts that belong to guest shoppers in an electronic commerce web site;

5              comparing the number of shopping carts that belong to guest shoppers with a guest  
6       shopper threshold;

7              when the number of shopping carts that belong to guest shoppers exceeds the guest  
8       shopper threshold, polling a guest shopper session object of a guest shopper to determine a last  
9       transaction time;

10             comparing the last transaction time with an expiration time; and

11             when the last transaction time is earlier than the expiration time, purging a shopping cart  
12       that belongs to the guest shopper.

1       8. A method for purging abandoned shopping carts from an electronic commerce web site,  
2       comprising the steps of:  
3              creating a shopper garbage object;  
4              creating a threshold object and registering the threshold object with the shopper garbage  
5       object;  
6              determining whether a shopper accessing the electronic commerce web site is a guest  
7       shopper;  
8              creating a session object for the shopper accessing the electronic commerce web site;  
9              when the shopper is a guest shopper, creating a guest shopper session object and  
10       registering the guest shopper session object with the shopper garbage object and the threshold  
11       object;  
12              polling the threshold object by the shopper garbage object to determine a number of  
13       shopping carts that belong to guest shoppers;  
14              comparing the number of shopping carts that belong to guest shoppers with a guest  
15       shopper threshold;  
16              when the number of shopping carts that belong to guest shoppers exceeds the guest  
17       shopper threshold, polling the guest shopper session object for a last transaction time;  
18              comparing the last transaction time with an expiration time; and  
19              when the last transaction time is earlier than the expiration time, purging a shopping cart  
20       that belongs to the guest shopper.